

We Claim:

1. A method of producing a genetically modified plant characterized as having dwarf adult stature, said method comprising:

(a) contacting a plant cell with a vector containing an exogenous nucleic acid sequence comprising at least one structural gene encoding a BAS1 polypeptide, said gene being operably associated with a regulatory sequence that causes overexpression of the gene, to obtain a transformed plant cell;

(b) producing a plant from said transformed plant cell; and

(c) selecting a plant exhibiting said dwarf adult stature.

2. The method of Claim 1, wherein the regulatory sequence comprises a constitutive promoter or an inducible promoter.

3. The method of Claim 1, wherein the nucleic acid further comprises a selectable marker.

4. The method of Claim 1, wherein the plant is a dicotyledonous plant, or a monocotyledonous plant.

5. The method of Claim 1, wherein said BAS1 polypeptide has the amino acid sequence of SEQ ID NO:2.

6. The method of Claim 1, wherein said exogenous nucleic acid sequence has the nucleotide sequence of SEQ ID NO:1.

7. The method of Claim 1, wherein said genetically modified plant exhibits green foliage that is darker than a wild-type plant.

8. The method of Claim 1, wherein the contacting is by physical means.

9. The method of Claim 1, wherein the contacting is by chemical means.

10. The method of Claim 1, wherein the plant cell is selected from the group consisting of protoplasts, gamete producing cells, and cells which regenerate into whole plants.

11. The method of Claim 1, wherein said nucleic acid is contained in a T-DNA derived vector.

12. A genetically modified plant comprising at least one exogenous nucleic acid sequence encoding an BAS1 polypeptide in its genome or at least one regulatory sequence

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that modifies expression of an endogenous *bas1* gene, wherein the plant is characterized as having a dwarf adult stature.

13. The plant of Claim 12, wherein the plant contains multiple exogenous nucleic acid sequences encoding a BAS1 polypeptide.

14. The plant of Claim 12, wherein the BAS1 polypeptide has the amino acid sequence of SEQ ID NO:2.

15. The plant of Claim 12, wherein the plant comprises darker green leaves in adult plants in comparison to green leaves in a wild-type adult plant.

16. The plant of Claim 12, wherein the nucleic acid sequence has the nucleotide sequence of SEQ ID NO:1.

17. The plant of Claim 12, wherein the exogenous nucleic acid sequence is operably associated with a regulatory nucleic acid sequence.

18. The plant of Claim 17, wherein the regulatory nucleic acid sequence comprises a promoter.

19. The plant of Claim 18, wherein the promoter is a constitutive promoter.

20. The plant of Claim 18, wherein the promoter is an inducible promoter.

21. The plant of Claim 12, wherein the plant is a dicotyledonous or a monocotyledonous plant.

22. A seed that germinates into a plant comprising at least one exogenous *bas1* nucleic acid sequence in its genome; wherein the plant is characterized as having a dwarf adult stature.

23. The seed of Claim 22, wherein the plant comprises multiple exogenous nucleic acid sequences encoding a BAS1 polypeptide.

24. The seed of Claim 22, wherein the BAS1 polypeptide has the amino acid sequence of SEQ ID NO:2.

25. The seed of Claim 22, wherein the plant comprises darker green leaves in adult plants in comparison to green leaves in a wild-type adult plant.

26. The seed of Claim 22, wherein the *bas1* nucleic acid sequence has the nucleotide sequence of SEQ ID NO:1.

27. The seed of Claim 22, wherein the *bas1* nucleic acid sequence is operably associated with a regulatory nucleic acid sequence.

28. The seed of Claim 27, wherein the regulatory nucleic acid sequence comprises a promoter.

29. The seed of Claim 28, wherein the promoter is a constitutive promoter.

30. The seed of Claim 28, wherein the promoter is an inducible promoter.

31. The seed of Claim 22, wherein the plant is a dicotyledonous plant.

32. The seed of Claim 22 wherein the plant is a monocotyledonous plant.

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